

**Appendix 9-5: Fluids Storage,
Handling and Spillage Remediation
Protocols**

APPENDIX 9-5: HYDROLOGY AND HYDROGEOLOGY 9

Introduction

Inappropriate storage and handling of fuels and oils can result in contamination of ground, ground water and surface water.

This procedure covers

- Bulk storage of fuels and oils, including waste oil;
- Filling of bulk storage tanks;
- Storage and handling of drums;
- Refuelling operations;
- Procedure for emptying bunded areas, and;
- Fuel and oil spills

Bulk storage of fuels and oils, including waste oil

- All fuels and oils in bulk shall be kept in bunded storage, the location of which shall be identified on a site plan;
- The walls and floor of storage bunds must be impervious to oil.;
- Tank filling points shall be inside the bunded area;
- Delivery lines shall be overhead or, if underground, sleeved;
- Delivery nozzles shall be stored inside the bund and locked when not in use;
- Bund drain valves, where fitted, shall be designed so that they can only be removed by key or hand held tool, except when emptying the bund under controlled conditions;
- All bulk storage tanks shall be appropriately labelled with contents and capacity;
- Spill kits shall be provided close to hand;
- Bunded areas shall be checked weekly for build up of oil residues, rainwater or debris, and;
- The inside of the bund shall have a line painted to identify when 10% of the capacity has been filled by rainwater etc.

Filling of bulk storage tanks

- A member of site staff must supervise all tank filling operations;
- Storage tank levels must be checked to gauge spare capacity before starting filling operations;
- Check delivery hoses and hose connections for leaks, and;
- Report spillages and leaks and clean them up promptly, disposing of waste correctly according to the requirements of prevailing regulation(s).

Storage and handling of drums

- All drums and containers used for the storage of fuels and oils, including waste oil, shall be appropriately labelled and kept in designated areas identified on a site plan. This will include temporary storage areas;
- All drums or containers will be kept in bunded storage or on bund trays. This will include temporary storage;
- Where drum taps are fitted these should be secure. The tap should be positioned over a bund tray to collect drips and spillage;
- No drum shall be stored in the open without a drum cap fitted;
- Drums shall be secured when moving them about the site;
- Report spillages and leaks and clean them up promptly;
- Spill kits shall be provided, and;
- Drum storage areas shall be checked weekly for evidence of poor practice.

APPENDIX 9-5: HYDROLOGY AND HYDROGEOLOGY 9

Refuelling operations

The person refuelling the vehicle must be present throughout the entire refuelling operation;
Check vehicle fuel tank level before starting refuelling operations to gauge how much fuel is required;
Check delivery hose from the pump / tank to the nozzle for leaks;
All delivery nozzles shall be fitted with an automatic cut-out to prevent over-filling;
Ensure delivery nozzle is held upright when moving between storage tank and vehicle;
Operatives should be prepared to react to any gas oil splashing out whilst re-fuelling;
Fuel delivery nozzles shall be locked or similarly disabled when not in use, and;
Report spillages and leaks and clean them up promptly.

Procedure for emptying bunded areas

Authority of site management is required before emptying a bund;
Details of bund emptying shall be recorded and maintained on site;
If the contents of the bund include floating oil then the water underneath this oil should be carefully pumped out. The remaining oil coated water should be collected and disposed of through a licensed contractor, and;
The reason for bund contamination shall be investigated.

Fuel and oil spills

Any spillage that cannot be cleaned up promptly with a rag or use of a shovel-full of absorbent material must be reported to the site Manager or his designated deputy who will co-ordinate the response and investigate the cause;
Spills to ground shall be absorbed and prevented from spreading by using absorbent materials such as sand, fines, absorbent mats, paper or cloth;
Halt the movement of fuel or oil towards a watercourse by creating a barrier in front of it by sand bagging, deployment of absorbent boom or use of 3mm or finer dust;
If oil enters a watercourse, prevent it spreading by deploying an absorbent boom;
If spilt oil or fuel leaves the site the Quarry Manager must inform the Environment Agency, and;
Contaminated materials from clean-up should be put in an appropriately labelled container and disposed of through a licensed contractor in line with regulatory requirements as stipulated by the Environment Agency.